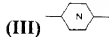


R^{11} is a straight-chain or branched alkyl or alkyloxy radical having 6 to 14 carbon atoms, where one or two $-CH_2$ -groups may be replaced by $-O-$ and/or $-C(=O)-$,



is 2-fluoro-pyridine-3,6-diyl

5



is cyclohexane-1,4-diyl

R^{10} is a straight-chain or branched alkyl or alkyloxy radical having 6 to 14 carbon atoms, where one or two $-CH_2$ -groups may be replaced by $-O-$ and/or $-C(=O)-$ and one H atom may be replaced by F

10

R^{12} is hydrogen or a straight-chain or branched alkyl or alkyloxy radical having 6 to 14 carbon atoms, where one or two $-CH_2$ -groups may be replaced by $-O-$ and/or $-C(=O)-$.

15 In a very particular embodiment of the very particularly preferred liquid-crystal mixture,

(II) is 5-alkyl-2-(4-alkyloxyphenyl)pyrimidine, 5-alkyl-2-(4-alkylcarbonyloxyphenyl)pyrimidine, 5-alkylcarbonyloxy-2-(4-alkyloxyphenyl)pyrimidine or 5-alkyl-2-(4-alkyloxy-2,3-difluorophenyl)pyrimidine

20

and,

(III) R^{10} is a straight-chain alkyloxy radical having 6 to 14 carbon atoms, where one H atom is replaced by F

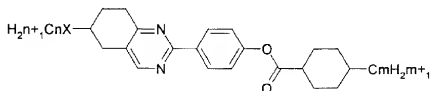
25

R^{12} is hydrogen.

The chiral smectic liquid-crystalline mixture preferably comprises 10-60% of one or more compounds of the formula (I). The mixture particularly preferably comprises 10-60% of 1-15 compounds of the formula (I). The mixture particularly preferably comprises 10-60% of 1-15 compounds of the formula (I) and 40-90% of 2-15 compounds of the formula (II). In particular, the mixture comprises 10-60% of 1-15 compounds of the formula (I), 40-90% of 2-15 compounds of the formula (II) and 1-40% of 1-15 compounds from the group (III), (IV), (V), (VI) and (VII), the total amount being 100%. The percentages are by weight.

35

The invention furthermore provides compounds of the general formula (I), selected from the compounds of the formula (XX), where



n	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4
m	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

n	5	5	5	5	5	5	5	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	8	
m	3	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

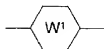
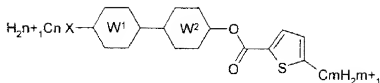
n	8	8	8	8	8	8	8	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10
m	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

n	2	2	2	2	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	
m	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

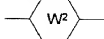
n	5	5	5	5	5	5	5	5	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	
m	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

n	8	8	8	8	8	8	8	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	
m	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10	3	4	5	6	7	8	9	10
X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

Compounds of the formula (XXI), where:



is 2-fluoropyridine-3,6-diyl, 4-fluoropyrimidine-2,5-diyl or phenylene-1,4-diyl or possibly pyridine-2,5-diyl, unsubstituted, mono-substituted or disubstituted by F



- 5 is 2-fluoropyridine-3,6-diyl, 4-fluoropyrimidine-2,5-diyl or phenylene-1,4-diyl or possibly pyridine-2,5-diyl, unsubstituted, mono-substituted or disubstituted by F

- 10 with the provisos that a) one of the rings W^1/W^2 must be one of the nitrogen-containing heterocycles and n and m are preferably from 1 to 14 and X is -O- or a single bond. n can alternatively be an integer from 2 to 10 and m can be an integer from 3 to 10

or preferably

- 15 b) the grasping W^1-W^2 is undirected and is 3-fluorobiphenyl-4,4'-diyl or 2-fluorobiphenyl-4,4'-diyl, where n, m and X are as defined below
- c) the grasping W^1-W^2 is undirected and is 2,3-difluorobiphenyl-4,4'-diyl, where n and m are from 1 to 14 and X is -O- or a single bond.